Title (en)

FLUORESCENT LIGHTING SYSTEM

Publication

EP 0042746 B1 19860611 (EN)

Application

EP 81302780 A 19810619

Priority

US 15907280 A 19800620

Abstract (en)

[origin: EP0042746A2] An improved lighting system (10) which in the preferred embodiment includes a cathode (12) having an external surface (34) being coated with a cathode outside film (40) for emitting electrons therefrom. A first anode (14) extends internal to the cathode (12) for heating the cathode (12) to thereby emit electrons from the external surface (34). A second anode (16) is positionally located external to the enclosed cathode (12) for accelerating the electrons emitted from the cathode external surface (34). A bulb member (18) encompasses the cathode (12), the first anode (14), and the second anode (16) in a hermetic type seal. The bulb member (18) has a predetermined gas composition contained therein with the gas composition atoms being ionized by the cathode emitted electrons. The gas composition ionized atoms radiate in the ultraviolet bandwidth of the electromagnetic spectrum. The bulb member (18) is coated with a fluorescent material (20) for intercepting the ultraviolet energy responsive to the ionization of the gas composition atoms. The fluorescent material (20) radiates in the visible bandwidth of the electromagnetic spectrum to give a visible light output.

IPC 1-7

H01J 61/02; H01J 61/38; H01J 61/067; H01J 61/09

IPC 8 full level

H01J 61/00 (2006.01); **H01J 17/49** (2012.01); **H01J 61/02** (2006.01); **H01J 61/067** (2006.01); **H01J 61/09** (2006.01); **H01J 61/16** (2006.01); **H01J 61/38** (2006.01); **H01J 61/42** (2006.01); **H01J 61/54** (2006.01); **H01J 61/76** (2006.01); **H01J 61/78** (2006.01); **H01J 63/08** (2006.01); H01J 61/70 (2006.01)

IPC 8 main group level

H01J (2006.01)

CPC (source: EP KR US)

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